STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission On Its Own Motion	)	
Consideration of the Federal Standard on Interconnection in Section 1254 of the Energy Policy Act of 2005.	)	Docket No. 06-0525

COMMENTS OF THE INTERSTATE RENEWABLE ENERGY COUNCIL

I. Introduction

The Interstate Renewable Energy Council ("IREC") respectfully submits these initial comments on proposed Rule 83, Ill. Adm. Code 466 (the "Proposed Rule") attached as Appendix B to the Order of March 26, 2008.

IREC is funded by the United States Department of Energy to participate in state rulemakings on net metering and interconnection of distributed generation. In the past year, IREC has been an active participant in interconnection workshops and proceedings in Illinois, North Carolina, Maryland, Utah, New Mexico and Florida. In Illinois, IREC has been involved in all of the interconnection workshops since mid-2007 and submitted extensive comments. As well, IREC is very familiar with the provisions of the model underlying the Proposed Rule, as the MADRI model[1] is the basis of standards recently completed in Maryland and under development in Utah.

[1] The Mid-Atlantic Demand Resource Initiative ("MADRI") model was developed in 2005 with extensive utility participation. The MADRI model can be used as a starting point, but to be effective, it requires revision on several key points, many of which Commission staff have addressed.

IREC filed comments with Commission staff on February 15, 2008, and several of IREC's recommendations are included in the Proposed Rule. However, on certain key provisions, the Proposed Rule is unchanged from earlier drafts. IREC recommends the changes herein to assure that Illinois safely interconnects distributed generation that would otherwise not be advanced due to unnecessary requirements in the Proposed Rule. Principally, these are:

a) Eliminate utility discretion to require isolation devices for Level 1.

b) Eliminate the unique 50% of minimum load requirement for Levels 1 and 2.

c) Revise the first Level 3 screen to 50% of maximum peak load.

d) Allow generators over 10 MW to use the Level 4 process.

e) Clarify that application fees are set in the rule and not at the EDC's discretion.

As well, IREC recommends several minor revisions and elimination of seven redundant pages in an effort to reduce the length of the rule.

II Principal Recommendations

a. Eliminate utility discretion to require isolation devices for Level 1.

IREC strongly recommends that Sections 466.60(h) and (i) be modified to eliminate utility discretion to require isolation devices for Level 1 facilities. Florida recently reached this exact conclusion, based on comments from three former major utility T&D managers, now with IREC, the National Renewable Energy Laboratory ("NREL") and the Florida Solar Energy Center. New Jersey's rule explicitly states that utilities may not require isolation devices at any level, which has apparently not cause any difficulty – and New Jersey has the second highest

number of solar installations in the country. As well, NREL has recently issued a study on the topic, reaching the conclusion that isolation devices are unnecessary for facilities under 10 kW.[2]

As the NREL study notes, utility line workers have not utilized the isolation devices in practice. This reality has led PG&E and SMUD, with thousands of solar installations each, to eliminate the requirement for isolation devices for small inverter-based systems (equivalent to Level 1). Inverter-based systems provide near-certainty that power will not be fed back to the grid when the grid is inoperative, and line worker procedures assure their safety in any event. Requiring the device just adds a cost of $200 to $1,000 without benefit.

To eliminate the isolation device requirement for Level 1, IREC recommends that the first sentence of Section 466.60(h) be modified to read "EDCs can require that Level 2, 3 and 4 distributed generation facilities have the capability to be isolated from the EDC." Also, the third sentence in that section, regarding secondary line interconnection, can be eliminated without effect. Finally, the first sentence of Section 466.60(i) will need to be modified to read: "A Level 2, 3 or 4 interconnection customer shall allow the EDC to isolate the interconnection customer's distributed generation facility."

Recognizing that this issue has been extensively discussed in the Illinois workshops, IREC suggests a possible compromise. If the requirement is not lifted for Level 1 facilities, at least require that utilities demonstrate that line workers are provided with maps of all distributed generation facilities and procedures for use of the isolation devices, and require evidence that the procedures are followed. There is no point in requiring the devices if line workers are not made aware of the location of Level 1 facilities in the first place. IREC can suggest language to effectuate this approach if the Commission requests such language.

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[2] See http://www.osti.gov/bridge/product.biblio.jsp?osti_id=922879.

b. Eliminate the unique 50% of minimum load requirement for Levels 1 and 2.

Use of a 50% of minimum load screen for Level 1 (Section 466.90(a)(1)) and for Level 2 (Section 466.100(a)(1)) is confusing, unnecessary and unique. The point of using 15% of maximum load as a cap is to assure that minimum load will never be exceeded, precluding the necessity for a separate minimum load provision. The standard 15% rule is used in the FERC standard and most states without incidence.

Minimum load data is rarely collected by distribution circuit, and the relevant sections note that the 15% rule will be used when minimum load data is not available. In practice, this means that the 15% rule will almost always be used. Maximum load on most circuits does not exceed minimum load by more than a factor of three, so in most cases, there will be little difference between the two approaches. Certain circuits, such as those supplying seasonal loads for agriculture, may have a higher differential between maximum and minimum loads, but these circuits are also among the least likely to have monitoring of minimum loading.

An unintended consequence of the minimum load requirement is that the most common type of distributed generation, solar energy facilities, will be regulated based on minimum loads that invariably occur at night, when solar energy facilities are not delivering power. Thus, any minimum load restriction applicable to solar energy facilities should logically be based on daylight minimum loads, though those would almost certainly be unavailable.

As a compromise, IREC suggests that the 15% rule be utilized and the 50% of minimum load requirement be dropped for Levels 1 and 2, with a concluding sentence in each relevant section such as: "Alternatively, the interconnection customer will fail this screen if the EDC presents evidence based on the distribution circuit's load data that the total distributed generation

interconnected to the distribution circuit, including the proposed distributed generation facility, could exceed the load on the distribution circuit at some time."

c. Revise the first Level 3 screen to 50% of maximum peak load.

The point of having a Level 3 is to provide an easier application process for facilities that are incapable of delivering power to the grid because the use reverse power relays. The Level 2 screen that is clearly inapplicable to such a system is the first screen – that the facility shall not exceed 15% of the distribution circuit maximum load. The intent of that screen is to assure that there will not be an instance in which the facility will generate more power than the entire load on the distribution circuit. Because Level 3 distributed generation facilities can not export at all, this would not be a concern.

Using all of the same screens as Level 2 makes Level 3 pointless. There is no need to apply under Level 3 if the screens are the same; the applicant can simply apply under Level 2. The primary difference between the two levels is that Level 3 nominally extends to 10 MW, but the maximum load on a distribution circuit is rarely above 10 MW, so the "15% of maximum load" screen effectively limits Level 3 applicants to no more than Level 2's cap of 2 MW.

Again, IREC suggests a compromise. Rather than eliminate the screen entirely, Illinois could follow the lead of Maryland, which set a higher percentage of maximum distribution circuit load for Level 3 facilities, setting the limit at 25% of maximum load. IREC suggests that a 50% limit could be used for Level 3 systems without incidence.

d. Allow generators over 10 MW to use the Level 4 process.

As Recycled Energy Development, LLC, the Environmental Law and Policy Center and IREC have stressed on numerous occasions, FERC does not necessarily have jurisdiction over all facilities in excess of 10 MW. In practice, almost all facilities larger than 10 MW will interconnect with transmission lines listed on a utility's Open Access Transmission Tariff, making the interconnection FERC jurisdictional. However, FERC has declined to exercise jurisdiction in certain instances, and there is no reason to create a gap.

The importance of extending the applicability of Illinois' rule to larger systems is that the wheel should not be reinvented for facilities over 10 MW that are not subject to FERC jurisdiction. The Proposed Rule has an effective process for Level 4 studies and a standardized agreement that could easily be applied to larger systems.

The rationale that is regularly provided for a 10 MW cap is that IEEE 1547 applies to systems up to 10 MW. Like most states, Illinois calls out IEEE 1547 as the technical standard to be used by the EDCs in evaluating interconnection requests (Section 466.40). Thus, there is a question about what standard would apply beyond 10 MW. However, FERC's Small Generator Interconnection Procedure ("SGIP") also relies on IEEE 1547 and extends its coverage to 20 MW. Paragraphs 71 to 74 of FERC Order 2006 provide utility argument for a 10 MW cap, and paragraph 75 concludes that: "we are keeping the 20 MW size limit for Small Generating Facilities because the interconnection studies and screens will identify any safety and reliability problems." In other words, above 10 MW the EDC can look to IEEE 1547 for guidance and determine on its own what interconnection facilities are required to assure safety. The EDC engineers doing this work determine the necessary interconnection facilities for traditional utility

generators, so it is reasonable to assume they can much such decisions for interconnection of smaller generators.

To effectuate a change to accommodate systems over 10 MW, the Commission will need to delete Section 466.10(a) and search for references to "10 MW" throughout the Rule and related documents. There are only three other references to 10 MW in the Rule, three references in the Level 2, 3 and 4 application, and the one reference in the Level 2,3 and 4 agreement – in the title.

e) Clarify that application fees are set in the rule and not at the EDC's discretion.

Section 466.50(b) states that EDCs shall specify the relevant application fees on the application forms. The application forms included in the Proposed Rule include the application fees discussed at length in the workshops.[3] To correct this mismatch, IREC suggests that Section 466.50(b) should state that: "Applicants shall remit the fee stated on the interconnection request form."

As discussed at length in the working group, IREC strongly supports Commission determination of appropriate application fees. Over 40,000 solar energy systems have been installed in the United States, so reasonable cost estimates can be based on application fees in states with the many installations.

Allowing utility determination of cost can lead to unintended consequences. The utilities' tendency would be to forecast very few applications based on historical data, and therefore calculate a high average cost per review. But, that logic is self-defeating: the

[3] The top of Proposed Rule Appendix A (Level 1 application) provides a $50 application fee. Page three of Proposed Rule Appendix D (Levels 2, 3 and 4 application) provides the range of fees for larger systems.

expectation of few applicants drives up the cost of review, which in turn reduces the expected number of applicants. As well, the utilities would have little incentive to set reasonable fees in the first place.

III. Other Suggested Revisions

IREC requests that the Commission consider the following revisions:

a. The three study agreements in Appendices E, F and G provide that "Interconnection customer shall provide a study deposit equal to 100 percent of estimated non-binding study costs when the customer is first in the queue." However, the interconnection customer is placed in the queue for the distribution circuit when the application is complete, long before the estimated study costs are determined. At the very least, this provision should be changed in all three study agreements to say that the deposit is due upon signing the relevant agreement. As well, a 100% deposit is excessive; a 50% deposit would be more reasonable.

b. IREC continues to support the use of higher limits for area network interconnections. Section 466.80(c) restricts area network connections to 50 kW in the aggregate, potentially less that half a percent of maximum load. Such a limitation effectively curtails the deployment of facilities in downtown areas, despite the obvious benefits of such facilities. New Jersey has set a 500 kW limit without incidence. As a compromise, IREC suggests that the limit in Illinois be raised to 200 kW.

c. The final page of the application form for Levels 2, 3 and 4 references "UL 1547", which is incorrect. The appropriate reference is to UL 1741.

IV. Recommendation to shorten the Proposed Rule

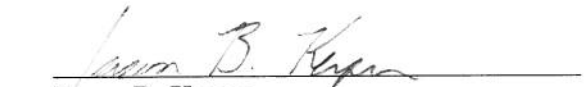
The Proposed Rule stretches to 75 pages, indicating a degree of complexity that is not entirely warranted. IREC recommends that two simple deletions to eliminate seven pages:

a. The attachments to each of the study agreements call for information provided by the applicant in the interconnection request form. There is no point in asking the applicant to repeat this information for the study agreements. This deletion saves a page for the feasibility study agreement in Appendix E, a page for the system impact study in Appendix F, and two pages for the facilities study in Appendix G.

b. The standard agreement for systems over 10 kW in Appendix C provides in Article 1.5 that terms used in the agreement are defined in the rule unless otherwise noted, but then includes three pages of defined terms as Attachment 1 to the agreement, though the definitions are identical to those used in the rule. This Attachment 1 could be eliminated, saving three pages.

V. CONCLUSION

IREC requests that Commission adopt the recommendations in these comments.



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VERIFICATION

STATE OF WASHINGTON)
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COUNTY OF KING)

Jason B. Keyes states that he is an Attorney representing the Interstate Renewable Energy Council, that he has read the foregoing ***Comments of the Interstate Renewable Energy Council*** in ICC Docket No. 06-0525 that he knows that the contents there of, and that to the best of his knowledge, information and belief, based upon reasonable inquiry, the contents are true and correct.

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Signed and sworn to before me
this 25th day of April, 2008.

Notary Public

Notary Public
State of Washington
MICHELLE J SAVEY
My Appointment Expires Jan 17, 2012

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NOTICE OF FILING

To: Service List

Please take notice that on this date I caused to be sent to Elizabeth A. Rolando, Chief Clerk, Illinois Commerce Commission, 527 East Capitol Avenue, Springfield, Illinois 62701, by electronic delivery, the attached verified comments of the Interstate Renewable Energy Council dated April 25, 2008 in the above-captioned docket.

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Dated: April 25, 2008

CERTIFICATE OF SERVICE

I, Jason B. Keyes, hereby certify that the above-referenced verified comments, together with this Notice of Filing and Certificate of Service, were sent to all parties of record listed on the docket service list by email on April 25, 2008. Paper copies will be provided upon request.

Jason B. Keyes
Attorney for the Interstate Renewable Energy Council